Woodward 2001-0246

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventor(s)

Sheryl Leigh Woodward

Case Name

Woodward 2001-

0246

Filing Date

1/24/2002

Serial No.

10/056,386

Examiner

Group Art Unit

2633

Christina Y. Leung

Title

System and Method for Monitoring and Controlling Light Propagation in

an Optical Transmission System

COMMISSIONER FOR PATENTS

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SIR:

AMENDMENT

Do not enter

In response to an Office action dated July 1, 2005 please amend the aboveidentified application as follows:

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1. (Currently Amended) An add multiplexer comprising:

an input port;

an optical circulator comprising a first port, a second port, and a third port, said first port of said optical circulator coupled to said input port;

an optical monitor mechanism coupled to said third port of said optical circulator; a wavelength add mechanism having an input port X that is connected to said second port of said optical circulator, an input port Y and an output port Z, which wavelength add mechanism is adapted to direct substantially all of a signal's optical power that is applied to input port Y flowing out of its output port Z, leaving an errant signal fraction of said optical power flowing out of said input port Y and adapted to receive optical signals from said second port and to provide no optical signals to said second port;

a tunable signal source coupled to interposed between said input port Y and wavelength add mechanism, wherein said optical monitor mechanism is coupled to said third port of said optical circulator and to said tunable source thereby providing a feedback path that allows said errant signal fraction of said optical power flowing out of said input port X to influence the signal is applied to input port Y; and

an output port coupled to said output port Z wavelength add mechanism.

- 2. (Currently Amended) An add multiplexer of claim 1 wherein said optical monitor measures the optical power at said third port 3 of said optical circulator.
- 3. (Currently Amended) An add multiplexer of claim 1 wherein said optical monitor measures the wavelength of the light at said third port 3 of said optical circulator.
- 4. (Currently Amended) An add multiplexer of claim 1 wherein said optical monitor measures both the optical power versus wavelength.
- 5. (Canceled) .